

ductruong

\* \* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 13:11:24 ON 20 JUN 2008

=> FILE PNTEXT

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.21

0.21

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FILE 'PATDPFULL' ENTERED AT 13:11:43 ON 20 JUN 2008

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FILE 'RDISCLOSURE' ENTERED AT 13:11:43 ON 20 JUN 2008

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FILE 'USPATFULL' ENTERED AT 13:11:43 ON 20 JUN 2008

CA INDEXING COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPATOLD' ENTERED AT 13:11:43 ON 20 JUN 2008

CA INDEXING COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPAT2' ENTERED AT 13:11:43 ON 20 JUN 2008

CA INDEXING COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

=> s sulfonated polymer# and membrane# and proton exchange

L1 251 SULFONATED POLYMER# AND MEMBRANE# AND PROTON EXCHANGE

=> s l1 and anode and cathode

L2 210 L1 AND ANODE AND CATHODE

=> s l2 and heteropoly acid#

L3 11 L2 AND HETEROPOLY ACID#

=> s l3 and copolymer#

L4 9 L3 AND COPOLYMER#

=> d l4 1-9

L4 ANSWER 1 OF 9 EPFULL COPYRIGHT 2008 EPO/FIZ KA on STN

AN 2006:50668 EPFULL EDP 20070103 ED 20070103 UP 20070905  
DUPD 20070905 DUPW 200736

TIEN Solid electrolyte, membrane and electrode assembly, and fuel  
cell.

TIFR Electrolyte solide, membrane et ensemble d'electrodes et  
pile a combustible.

TIDE Feststoff Elektrolyt, Membran und Elektrodenanordnung sowie

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Brenstoffzelle.

IN Kaneko, Masashi, c/o Fuji Photo Film Co., Ltd.210 Nakanuma,  
Minami-ashigara-shiKanagawa 250-0193, JP;  
Nomura, Kimiatsu, c/o Fuji Photo Film Co., Ltd.210 Nakanuma,  
Minami-ashigara-shiKanagawa 250-0193, JP

PA FUJIFILM Corporation, 26-30, Nishiazabu 2-chome, Minato-kuTokyo, JP

PAN 7786510

AG HOFFMANN EITLE, Patent- und Rechtsanwalte Arabellastrasse 4, 81925  
Muenchen, DE

AGN 101514

DT Patent

LAF English

LA English

LAP English

TL German; English; French

PIT EPAl Application published with search report

PI EP 1739780 A1 20070103

DS AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL  
PL PT RO SE SI SK TR

AI EP 2006-9826 A 20060512

PRAI JP 2005-141503 A 20050513  
JP 2006-15972 A 20060125

IPCI H01M0008-10 [I,A]; H01M0008-02 [I,A]  
H01M0008-10 [I,C\*]; H01M0008-02 [I,C\*]

L4 ANSWER 2 OF 9 PCTFULL COPYRIGHT 2008 Univentio on STN

AN 2007126222 PCTFULL ED 20071114 EW 200745

TIEN PROTON CONDUCTIVE COMPOSITE MEMBRANE COMPRISING SURFACTANT AND  
INORGANIC FILLER, AND FUEL CELL COMPRISING THE SAME

TIFR MEMBRANE COMPOSITE A CONDUCTION PROTONIQUE COMPRENANT UN  
TENSIO-ACTIF ET UNE CHARGE INORGANIQUE, ET PILE A COMBUSTIBLE COMPRENANT  
CETTE MEMBRANE

IN LEE, Young Moo, 109-1101 Seocho Raemian Apt., Seocho 4-dong, Seocho-gu  
Seoul 137-070, KR;  
HWANG, Shin Young, 483 Deongnye-ri, Sanpo-myeon Naju-si, Jeollanam-do  
520-832, KR;  
LEE, Chang Hyun, 114-1001 Hanjin Apt., Haengdang 2-dong, Seongdong-gu  
Seoul 133-070, KR

PA INDUSTRY-UNIVERSITY COOPERATION FOUNDATION, HANYANG UNIVERSITY, Rm110  
1Fr. HIT B/D, 17 Haengdang-dong, Sungdong-gu Seoul 133-791, KR

AG JANG, Soo-Young, Rm. 1610 Hyundai Venturitel, 642-1 Yeoksam 1-dong,  
Gangnam-gu Seoul 135-910, KR

LAF Korean

LA English

DT Patent

PI WO 2007126222 A1 20071108

DS W: AE AG AL AM AT AU AZ BA BB BG BH BR BW BY BZ CA CH CN CO  
CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM GT HN  
HR HU ID IL IN IS JP KE KG KM KN KP KZ LA LC LK LR LS LT  
LU LY MA MD MG MK MN MW MX MY MZ NA NG NI NO NZ OM PG PH  
PL PT RO RS RU SC SD SE SG SK SL SM SV SY TJ TM TN TR TT  
TZ UA UG US UZ VC VN ZA ZM ZW

RW (ARIPO): BW GH GM KE LS MW MZ NA SD SL SZ TZ UG ZM ZW

RW (EAPO): AM AZ BY KG KZ MD RU TJ TM

RW (EPO): AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LT  
LU LV MC MT NL PL PT RO SE SI SK TR

RW (OAPI): BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

PRAI KR 2006-1020060038481 20060428

AI WO 2007-KR1794 A 20070413

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IPCI H01M0008-02 [I,A]  
H01M0008-02 [I,C\*]

L4 ANSWER 3 OF 9 PCTFULL COPYRIGHT 2008 Univentio on STN  
AN 2003082956 PCTFULL ED 20031027 EW 200341  
TIEN SULFONATED POLYMER COMPOSITION FOR FORMING FUEL CELL  
ELECTRODES  
TIFR COMPOSITION DE POLYMERES SULFONE POUR FORMER DES ELECTRODES DE PILE A  
COMBUSTIBLE  
IN MCGRATH, James, E., 902 Elliot Drive, Blacksburg, VA 24060, US [US, US];  
HICKNER, Michael, 703 Toms Creek Road, Blacksburg, VA 20460, US [US, US]  
PA VIRGINIA TECH INTELLECTUAL PROPERTIES, INC., 1872 Pratt Drive, Suite  
1625, Blacksburg, VA 24060, US [US, US], for all designates States  
except US;  
MCGRATH, James, E., 902 Elliot Drive, Blacksburg, VA 24060, US [US, US],  
for US only;  
HICKNER, Michael, 703 Toms Creek Road, Blacksburg, VA 20460, US [US,  
US], for US only  
AG LANE, Philip, D., McGuireWoods, LLP, Suite 1800, 1750 Tysons Boulevard,  
McLean, VA 22102, US  
LAF English  
LA English  
DT Patent  
PI WO 2003082956 A1 20031009  
DS W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU  
CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN  
IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN  
MW MX MZ NO NZ OM PH PL PT RO RU SC SD SE SG SK SL TJ TM  
TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW  
RW (ARIPO): GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW  
RW (EAPO): AM AZ BY KG KZ MD RU TJ TM  
RW (EPO): AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC  
NL PT RO SE SI SK TR  
RW (OAPI): BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG  
PRAI US 2002-60/368,527 20020401  
US 2002-60/368,958 20020402  
AI WO 2003-US9918 A 20030401  
ICM C08G075-20

L4 ANSWER 4 OF 9 PCTFULL COPYRIGHT 2008 Univentio on STN  
AN 2002025764 PCTFULL ED 20020701 EW 200213  
TIEN ION-CONDUCTING SULFONATED POLYMERIC MATERIALS  
TIFR POLYMERES SULFONES CONDUCTEURS D'IONS  
IN MCGRATH, James, E., 902 Elliot Drive, Blacksburg, VA 24060, US;  
HICKNER, Michael, 703 Toms Creek Road, Blacksburg, VA 20460, US;  
WANG, Feng, 611 Clay Street, Apt. 12, Blacksburg, VA 20460, US;  
KIM, Yu-Seung, 3600 Richmond Lane #C, Blacksburg, VA 20460, US  
PA VIRGINIA TECH INTELLECTUAL PROPERTIES, INC., Suite 1625, 1872 Pratt  
Drive, Blacksburg, VA 24060, US [US, US]  
AG WHITHAM, Michael, E., McGuireWoods, LLP, 1750 Tysons Boulevard, Suite  
1800, McLean, VA 22102-4215, US  
LAF English  
LA English  
DT Patent  
PI WO 2002025764 A1 20020328  
DS W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU  
CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN  
IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN  
MW MX MZ NO NZ PH PL PT RO RU SD SE SG SI SK SL TJ TM TR

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TT TZ UA UG UZ VN YU ZA ZW  
RW (ARIPO): GH GM KE LS MW MZ SD SL SZ TZ UG ZW  
RW (EAPO): AM AZ BY KG KZ MD RU TJ TM  
RW (EPO): AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR  
RW (OAPI): BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG  
PRAI US 2000-60/234,177 20000920  
AI WO 2001-US29293 A 20010920  
ICM H01M008-10  
ICS C08G069-26; C08G075-00

L4 ANSWER 5 OF 9 USPATFULL on STN  
AN 2006:327780 USPATFULL  
TI Solid electrolyte, membrane and electrode assembly, and fuel  
cell  
IN Kaneko, Masashi, Minami-ashigara-shi, JAPAN  
Nomura, Kimiatsu, Minami-ashigara-shi, JAPAN  
PA Fuji Photo Film Co., Ltd. (non-U.S. corporation)  
PI US 20060280983 A1 20061214  
AI US 2006-433286 A1 20060512 (11)  
PRAI JP 2005-141503 20050513  
JP 2006-15972 20060125  
DT Utility  
FS APPLICATION  
LN.CNT 1584  
INCL INCLM: 429/033.000  
INCLS: 521/025.000; 429/314.000  
NCL NCLM: 429/033.000  
NCLS: 429/314.000; 521/025.000  
IC IPCI H01M0008-10 [I,A]; C08J0005-20 [I,A]  
IPCR H01M0008-10 [I,C]; H01M0008-10 [I,A]; C08J0005-20 [I,C];  
C08J0005-20 [I,A]  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 6 OF 9 USPATFULL on STN  
AN 2006:92636 USPATFULL  
TI Nano-structured ion-conducting inorganic membranes for fuel  
cell applications  
IN Yang, Laixia, Xi'an, CHINA  
Guo, Jiusheng, Fargo, ND, UNITED STATES  
Jang, Bor Z., Fargo, ND, UNITED STATES  
PI US 20060078765 A1 20060413  
AI US 2004-962556 A1 20041012 (10)  
DT Utility  
FS APPLICATION  
LN.CNT 683  
INCL INCLM: 429/012.000  
INCLS: 429/129.000  
NCL NCLM: 429/012.000  
NCLS: 429/129.000  
IC IPCI H01M0008-00 [I,A]; H01M0002-14 [I,A]  
IPCR H01M0008-00 [I,A]; H01M0002-14 [I,C]; H01M0002-14 [I,A];  
H01M0008-00 [I,C]  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 7 OF 9 USPATFULL on STN  
AN 2006:41412 USPATFULL  
TI Sulfonated polymer composition for forming fuel cell  
electrodes  
IN McGrath, James E, Blacksburg, VA, UNITED STATES

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Hickner, Michael, Blacksburg, VA, UNITED STATES  
PI US 20060036064 A1 20060216  
AI US 2003-509736 A1 20030401 (10)  
WO 2003-US9918 20030401

20050622 PCT 371 date  
PRAI US 2002-368527P 20020401 (60)  
US 2003-368958P 20020402 (60)

DT Utility  
FS APPLICATION  
LN.CNT 494

INCL INCLM: 528/373.000

NCL NCLM: 528/373.000

IC IPCI C08G0075-00 [I,A]

IPCR C08G0075-00 [I,A]; C08G0075-00 [I,C]

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 8 OF 9 USPATFULL on STN

AN 2002:172465 USPATFULL

TI Ion-conducting sulfonated polymeric materials

IN McGrath, James E., Blacksburg, VA, UNITED STATES

Hickner, Michael, Blacksburg, VA, UNITED STATES

Wang, Feng, Blacksburg, VA, UNITED STATES

Kim, Yu-Seung, Blacksburg, VA, UNITED STATES

PI US 20020091225 A1 20020711

US 7361729 B2 20080422

AI US 2001-956256 A1 20010920 (9)

PRAI US 2001-311350P 20010813 (60)

US 2001-311360P 20010813 (60)

US 2000-234177P 20000920 (60)

DT Utility  
FS APPLICATION

LN.CNT 977

INCL INCLM: 528/170.000

INCLS: 528/373.000

NCL NCLM: 528/391.000; 528/170.000

NCLS: 429/209.000; 429/212.000; 429/213.000; 521/027.000; 521/033.000;  
528/363.000; 528/364.000; 528/373.000

IC [7]

ICM C08G073-00

ICS C08G075-00

IPCI C08G0073-00 [ICM,7]; C08G0075-00 [ICS,7]

IPCI-2 C08G0075-20 [I,A]; C08G0075-00 [I,C\*]

IPCR B01D0069-00 [I,C\*]; B01D0069-14 [I,A]; B01D0071-00 [I,C\*];

B01D0071-64 [I,A]; B01D0071-68 [I,A]; B01D0071-82 [I,A];

C08G0073-00 [I,C\*]; C08G0073-10 [I,A]; C08G0075-00 [I,C\*];

C08G0075-23 [I,A]

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 9 OF 9 USPAT2 on STN

AN 2002:172465 USPAT2

TI Ion-conducting sulfonated polymeric materials

IN McGrath, James E., Blacksburg, VA, UNITED STATES

Hickner, Michael, Blacksburg, VA, UNITED STATES

Wang, Feng, Blacksburg, VA, UNITED STATES

Kim, Yu-Seung, Blacksburg, VA, UNITED STATES

PA Virginia Tech Intellectual Properties, Inc., Blacksburg, VA, UNITED STATES (U.S. corporation)

PI US 7361729 B2 20080422

AI US 2001-956256 20010920 (9)

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PRAI US 2000-234177P 20000920 (60)  
US 2001-311350P 20010813 (60)  
US 2001-311360P 20010813 (60)  
DT Utility  
FS GRANTED  
LN.CNT 965  
INCL INCLM: 528/391.000  
INCLS: 528/364.000; 528/363.000; 528/373.000; 521/027.000; 521/033.000;  
429/209.000; 429/212.000; 429/213.000  
NCL NCLM: 528/391.000; 528/170.000  
NCLS: 429/209.000; 429/212.000; 429/213.000; 521/027.000; 521/033.000;  
528/363.000; 528/364.000; 528/373.000  
IC IPCI C08G0073-00 [ICM,7]; C08G0075-00 [ICS,7]  
IPCI-2 C08G0075-20 [I,A]; C08G0075-00 [I,C\*]  
IPCR B01D0069-00 [I,C\*]; B01D0069-14 [I,A]; B01D0071-00 [I,C\*];  
B01D0071-64 [I,A]; B01D0071-68 [I,A]; B01D0071-82 [I,A];  
C08G0073-00 [I,C\*]; C08G0073-10 [I,A]; C08G0075-00 [I,C\*];  
C08G0075-23 [I,A]  
EXF 528/391; 528/364; 528/363; 528/373; 521/27; 521/33; 429/209; 429/212;  
429/213  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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